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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/542,952

04/17/2006

David Cressey

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2038

26645

7590

05/12/2009

THE LUBRIZOL CORPORATION

ATTN: DOCKET CLERK, PATENT DEPT.

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WICKLIFFE, OH 44092

EXAMINER

OLADAPO, TAIWO

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

05/12/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/542,952

Applicant(s)

CRESSEY ET AL.

Examiner

TAIWO OLADAPO

Art Unit

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 21, 23, 25-34, 36 and 37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 21, 23, 25-34, 36 and 37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/888)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The amendment dated 04/14/2009 has been considered and entered for the record. The amendment overcomes previous rejections which are hereby withdrawn. New rejections necessitated by the amendments are made below.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 – 5, 31 – 34, 36, 37, are rejected under 35 U.S.C. 102(b) as being anticipated by Habeeb (US 5,330,666)

4. In regards to claims 1, 36, Habeeb teaches a lubricant composition comprising a reaction product of hydrocarbyl salicylic acid and a monoamine compound of formula (I) in the reference (column 1 lines 45 – 66). The hydrocarbyl group, R¹, in the reference has 2 to 30 carbon atoms. The salicylic amine reaction product taught by Habeeb meets the limitations of the reaction product of the claim, when a monoamine group reacts with the compound of formula (I) of the claim, which is a salicylic acid when R³ in the claim is hydrogen, U in the claim is a hydroxyl group, R² is a hydrocarbyl group and j is 1. The lubricant contains a lubricating oil (column 2 line 10).

5. In regards to claim 2, Habeeb teaches the lubricant comprising additives such as dispersants, antioxidants, friction modifiers, viscosity index improvers etc. (column 4 lines 2 – 9).
6. In regards to claim 3, Habeeb teaches the lubricant comprises a major amount of lubricating oil, i.e. from 50 up to 99.9%, and the amine compound comprises preferably 0.05 to 1.0 wt. % (column 3 line 64 – column 4 line 2).
7. In regards to claims 4, 5, Habeeb teaches the lubricant that is suitably free of sulfur, phosphorus or ash. Habeeb teaches that silicon-based oils comprising phosphorus-acids may be used as a base oil but does not recite other phosphorus based compounds in the lubricant (column 2 lines 37 – 43). Habeeb teaches the amine salts may be substituted with oxygen, nitrogen or sulfur, and does not recite other sulfur based compounds in the lubricant.
8. In regards to claim 31, Habeeb teaches a composition that is essentially free of metal.
9. In regards to claim 32, Habeeb teaches the process of preparing the amine salt by heating and reacting the reactants (Example 1).
10. In regards to claim 33, Habeeb provides the amine salt product of the process.
11. In regards to claim 34, Habeeb provides the lubricating oil for lubricating internal combustion engine comprising the reaction product (abstract). When the lubricant comprising the product is added to an engine, the method is intrinsically performed.
12. In regards to claim 37, Habeeb teaches a sulfur free lubricant as previously recited.

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

15. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

16. Claims 21, 23, are rejected under 35 U.S.C. 103(a) as being unpatentable over Habeeb (US 5,330,666) in view of Sougawa et al. (US 6,147,035)

17. In regards to claims 21, 23, Habeeb teaches the lubricating oil comprising the salicylate product but does not recite metal-based compound. Sougawa teaches lubricants containing overbased metal salicylate (title) which serves as a detergent or dispersant. Habeeb teaches

adding the metal salicylate is the amount of 0.5 to 10 wt.% (column 2 lines 15 – 18). It would have been obvious to one of ordinary skill in the art at the time of the invention to have added overbased metal salicylates in the lubricating oil of Habeeb, as they are suitable detergent or dispersant additives to the oil.

18. Claims 25 – 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Habeeb (US 5,330,666) in view of Hoke (US 4,090,971)

19. In regards to claims 25, Habeeb teaches the composition but does not particularly recite the nitrogen compound of the claim.

Hoke teaches amides of carboxylic acids containing alkyl substituted hydroxyl aromatic groups as in the invention of Habeeb (abstract). Hoke teaches that the amides can be prepared from compounds which react with the carboxylic acids, such as, guanidines (column 2 lines 65 – 68).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have use the amine compounds of Hoke in preparing the carboxylic hydroxyl aromatic amide compounds of Habeeb, since Hoke teaches they are suitable carboxylic amide additives for lubricants.

20. In regards to claim 26, Habeeb and Hoke combined teach the composition, wherein component (a)(ii) are primary monoamines as previously stated.

21. In regards to claim 27, Habeeb and Hoke combined teach the composition, wherein the component (a)(ii) is a polyamine having ethylene diamine, or ethylene polyamines, i.e. triethylene tetramine (Hoke, column 4 lines 8 – 42).

22. In regards to claim 28, Habeeb and Hoke combined teach the composition, wherein the component (a)(ii) are pyrroles, piperidines, pyridines etc (Hoke, column 3 lines 64 – 68).

23. In regards to claims 29, 30, Habeeb and Hoke combined teach the composition, wherein the component (a)(ii) is i.e. ethanol amine which are primary aminoalcohols having 1 hydroxyl group and 2 carbons (Hoke, column 3 lines 47 – 55).

Response to Arguments

24. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

25. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAIWO OLADAPO whose telephone number is (571)270-3723. The examiner can normally be reached on 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571)272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TO

/Glenn A Caldarola/
Acting SPE of Art Unit 1797